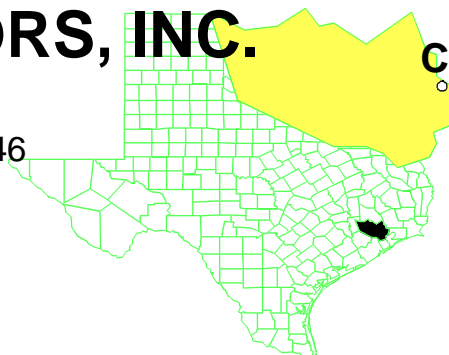


DIXIE OIL PROCESSORS, INC. TEXAS

EPA ID# TXD089793046



EPA REGION 6
CONGRESSIONAL DIST.
09

Harris County
20 miles southeast of
Houston near Friendswood

Site Description

Location:

- On Dixie Farm Road in southern Harris County, Texas.
- The site is about 1.5 miles southwest of Interstate Highway 45 South (Gulf Freeway) at the Ellington Field exit.
- The City of Friendswood is approximately 2 miles to the south.

Population:

- Approximately 5,000 people live within one mile of the site.

Setting:

- The nearest residence is adjacent to the site, in the Southbend subdivision.
- The nearest drinking water well is not currently used and is within 0.5 mile radius of the site, but draws water from an uncontaminated aquifer.
- The site occupies approximately 26.6 acres and is currently owned by Ralph Lowe, a former operator of the site.
- Dixie Farm Road divides the site into two parcels, the northern tract of about 19 acres, historically used for storage purposes, and the southern tract of about 7.6 acres where processing activities occurred.

Hydrogeology:

- Mud Gulley (a stream) borders the site to the west.
- Surface drainage from the site is to the southwest into Mud Gulley.
- Soils on the Dixie site consist of surface clay ranging in thickness from twelve to twenty feet across the site. Below this zone is a fairly uniform zone of sandfilled channels. This zone is approximately 25 feet thick.
- Below the sand channel zone is a clay rich zone of thickness with an average thickness of five feet.
- Below the clay zone, a thick sand is found across the site at about 50'-55' below the surface. The sand thickness is approximately 40'.
- Two water-bearing zones have been identified in the immediate subsurface of the site. The uppermost water-bearing zone is the stratum referred to above as the sand channel zone, and is found at depths ranging from 14.5'-21.5' and extending to depths of 40'-45'. The direction of flow is toward Mud Gulley (south).
- The second water-bearing zone is the stratum termed the "50-foot sand". This aquifer is found at depths of between 52' and 61.5' to depths of between 92.5 and 99' below the surface. Additionally, there exists a positive vertical hydraulic gradient from the deeper water-bearing zone toward the shallow water-bearing zone in certain portions of the site.

Wastes and Volumes

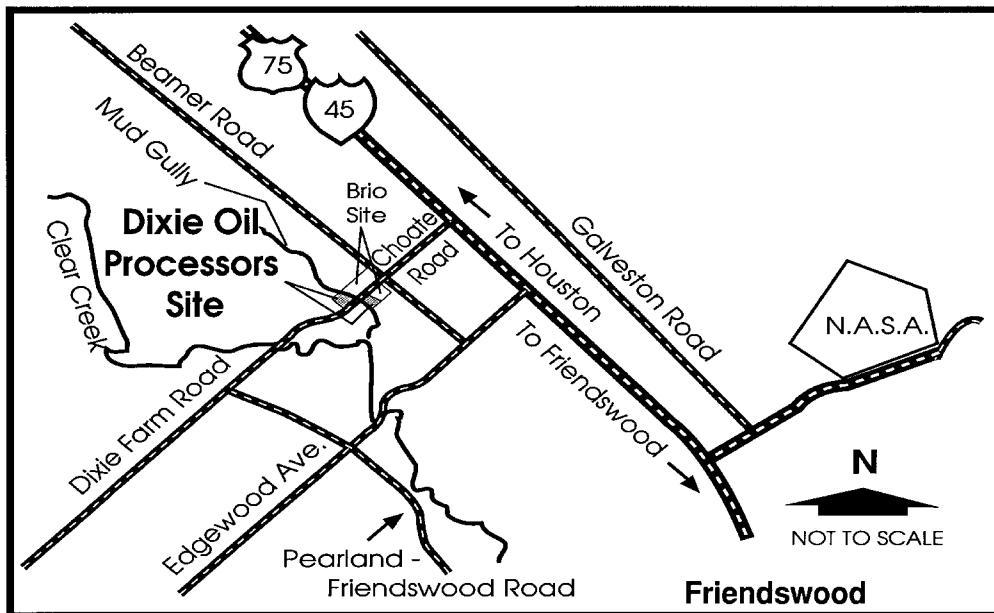
- Principal pollutants include ethylbenzene (6.4 parts per million, or ppm), hexachlorobenzene (674 ppm) and copper (72,860 ppm) in soils.
- Estimated waste volumes include 118,420 gallons in the storage vessels, and 107,351 cubic yards of measurable amounts of contaminants in soils.

Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 34.21
Proposed Date: 6/24/88
Final Date: 10/04/89
NPL Update: No. 7

Site Map and Diagram



The Remediation Process

Site History:

- Intercoastal Chemical Company operated a copper recovery and hydrocarbon washing facility on the DOP North site from 1969 until 1978.
- In 1978, DOP began oil recovery at DOP South, including cuprous chloride catalyst; hydrocarbon washing; oil washing; and blending distilling residues from local chemical plants.
- The Remedial Investigation and Feasibility Study (RI/FS) was completed in January 1988.

Health Considerations:

- The site poses four major risks to human health and the environment:
 - Ingestion of on-site soils;
 - Direct contact with on-site soils;
 - Inhalation of dust from the site; and
 - Ingestion of shallow ground water from the site.
- However, these risks are only possible should restrictions to site access and use be violated.

Other Environmental Risks:

- A housing development existed to the east, however, it has been dismantled.
- A municipal drinking water well is located less than 0.5 mile from the site at a 1200 foot depth.
- Shallow ground water contamination is evident, primarily in the 20 ft. - 45 ft. aquifer.

Record of Decision

Signed: March 31, 1988

- The remedy selected was Limited Action and Monitoring

Other Remedies Considered	Reason Not Chosen
1. "No Action"	Did not meet remedial objectives
2. Multi-Layer Cap	Does not achieve reduction of mobility, toxicity and volume to the extent provided by incineration and biotreatment.
3. Storage Vault	Same as Cap, above.
4. Off-site Disposal	EPA's least preferred alternative when alternative treatment technologies are available.

Community Involvement

- Community Involvement Plan: Revised 8/89
- Open houses and workshops: 12/88, 1/90, 8/91
- Original Proposed Plan Fact Sheet and Public Meeting: 1/88
- Original ROD Fact Sheet: 5/88
- Milestone Fact Sheets: Often combined with Brio Refining Updates
- Citizens on site mailing list: 141
- Constituency Interest: High level of interest and openly hostile; concerned with health and property values. Same concerns as at the Brio site.
- Site Repository: San Jacinto College, South Campus, 13735 Beamer Road, Houston, TX 77089

Technical Assistance Grant

- Availability Notice: 6/22/89
- Letters of Intent Received:
 - 1) South Belt Superfund Coalition (SBSC) - 6/1/89
 - 2) Homes, Environment and Lives in Peril (HELP) - 7/28/89
- Final Application Received: HELP submitted final application on 12/90.
- Grant Award: 1/31/91
- Current Status: Grant funds 95% expended; close-out finalized
- Technical Advisor: Joel Hirshhorn

Fiscal and Program Management

- **Remedial Project Manager (EPA):** John Meyer, 214-665-6742, Mail Code: 6SF-LL
- **State Contact:** (TNRCC) Ashby McMullan, 512-239-2595, Mail Code 144
- **Community Involvement Coordinator (EPA):** Donn Walters, 214-665-6483, Mail Code: 6SF-P
- **Attorney (EPA):** Anne Foster, 214-665-2169, Mail Code: 6SF-DL
- **State Coordinator (EPA):** Shirley Workman, 214-665-8522, Mail Code: 6SF-AT
- **Prime Contractor:** Roy F. Weston (EPA Oversight)
Canonie Environmental (PRP)

Cost Recovery: PRP Lead (Enforcement)

- PRPs Identified: 12
- Viable PRP: DOP Task Force
- A Consent Order was entered into with PRPs in June 1986 to conduct the RI/FS.
- Administrative Order on Consent signed 6/29/89, to register RD start in Summer 1989.
- Letters mailed to PRPs on 9/11/89 requesting indication of intent to complete negotiations.
- PRPs responded on 9/28/89, indicating they were anxious to resolve settlement.
- Meeting set for 11/14/89 to resume negotiations; PRPs declined to sign a Consent Decree.
- On 3/28/91, the Department of Justice filed a 10F Cost Recovery claim against the PRPs.
- EPA issued a Unilateral Administrative Order in July 1991 for implementation of the RD/RA.

Present Status and Issues

- The emergency removal of contaminated soils undertaken by DOP in 1984 and the ongoing cleanup activities have reduced the potential of exposure to hazardous substances, making the Dixie Oil Processors, Inc. site safer to nearby residents and the environment.
- Remedy construction activities were concluded on the site in March 1993.
- A project Close-Out Report was completed in June 1993.

Benefits

- Remediation of the Dixie Oil Processors site reduced environmental risks for over 5,000 people living within a one-mile radius of this Superfund site.